



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,628	07/16/2008	Dieter Ammon	095309.58118US	9707
23911 7590 03/28/2011 CROWELL & MORING LLP INTELLECTUAL PROPERTY GROUP P.O. BOX 14300 WASHINGTON, DC 20044-4300			EXAMINER WILHELM, TIMOTHY	
			ART UNIT 3616	PAPER NUMBER
			MAIL DATE 03/28/2011	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/589,628

Applicant(s)

AMMON ET AL.

Examiner

Timothy D. Wilhelm

Art Unit

3616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-14 and 19-22 is/are rejected.
- 7) ☒ Claim(s) 15-18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 August 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-940)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date 8/16/2006
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to because the drawings contain characters and letters that are difficult to read and understand. Also, the dotted lines are barely visible, especially in the case of Fig. 1 in which the wheels 1,2,3,4 are almost completely unobservable. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Lines 8 and 9, which reads "producing a resulting yaw moment, in determining a desired yaw rate from the information of an on-board device for a roadway in a control unit" is unclear as to the on-board device for a roadway. In an earlier iteration of the claims, the onboard device was claimed as having a function of determining a profile of the roadway to be used in determining a desired yaw rate, which is also specified in claim 15. However, with the omission of the above mentioned language, the limitation of an "on-board device for a roadway in a control unit" becomes unclear as to the device's claimed relationship to the roadway and how it affects the overall invention. As it is currently written, the on-board device may be taken as any device within the vehicle for determining anything such as lateral acceleration and slip angle. A more clear definition within claim 1 of the on-board device may also help to establish the claim language over the prior art. Applicant is welcome to contact Examiner if further clarity or discussion of the matter is needed.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 12,13,19,21, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese patent number JP 11011130 issued to Shibue et al, hereafter referred to as Shibue in view of U.S. patent number 6,719,087 issued to Demerly. Schulke discloses a method for operating an active chassis system of a motor vehicle, comprising:

arranging support assemblies which interact with actuating elements 5 between the wheels and a vehicle body, with wheel contact forces of the wheels assuming different values as a result of actuation of the actuating elements 5 and a side force being generated at the wheels having the toe-in angle,

producing a resulting yaw moment, in determining a desired yaw rate from the information of an on-board device for a roadway in a control unit, and

setting the wheel contact forces as a function of the determined desired yaw rate (Patent Abstract);

wherein the desired yaw rate is determined based on data obtained from a velocity sensor 31 and a yaw rate sensor 33;

wherein the wheel contact forces are set by the actuating elements 5 to change prestressing of a hydraulic spring 5;

wherein the slip angle is changeable.

According to Shibue, change of the wheel contact forces plays as a yaw moment for reducing a car body slip angle detected by a yaw rate sensor 33, wherein the actuators 5 are actuated to give the vehicle a predetermined desired yaw rate through adjusting the ground load (wheel contact forces).

Shibue fails to disclose the wheels as having a toe-in. Demerly teaches a method of improving vehicle stability wherein the wheels 38 of the front axle may be toed-in to better effectuate directional response of the motor vehicle (column 5, lines 16-20). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Shibue with the teaching of Demerly such that the wheels of the front axis are toed-in to effectuate better directional response from the vehicle.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shibue and Demerly, as applied to claims 12,13,19,21, and 22 above, and further in view of U.S. patent number 7,143,864 issued to Mattson et al, hereafter referred to as Mattson. Shibue and Demerly fail to disclose that the desired yaw rate is determined as a function of a steering wheel angle. Mattson teaches that it is common in the art to determine a desired yaw rate for the travel of a vehicle through detection of the steering wheel angle (Abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Shibue and Demerly with the teaching of Mattson's method of calculating a desired yaw rate as a function of the steering wheel angle to more accurately ascertain the driver's intent in comparison to the road surface.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shibue and Demerly, as applied to claims 12,13,19,21, and 22 above, and further in view of U.S. patent number 6,663,113 issued to Schulke et al, hereafter referred to as Schulke. Shibue and Demerly fail to disclose the wheel contact forces as being set by changing

of the prestressing of a stabilizer. Schulke teaches a system and method for reducing stopping distance and improving traction in motor vehicles, wherein the system includes actuators 4 for changing the prestressing of a stabilizer in order to adjust the wheel contact forces of the four wheels of the vehicle in order to affect yaw compensation for a vehicle driving over a surface with differing coefficients of friction. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Shibue and Demerly with the teaching of Schulke's stabilizer actuators since it would have simply required switching one means of actuation for another known means in order to yield predictable results.

Allowable Subject Matter

6. Claims 15-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy D. Wilhelm whose telephone number is 571-272-6980. The examiner can normally be reached on 9:00 AM to 5:30 PM Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 571-272-7742. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Timothy D Wilhelm
Examiner
Art Unit 3616

/Timothy D Wilhelm/
March 25, 2011

/Ruth Ilan/

Primary Examiner, Art Unit 3616